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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,472	03/04/2002	Lothar Quick	60680-1562	1398

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EXAMINER

PATEL, VISHAL A

ART UNIT PAPER NUMBER

3676

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,472

Applicant(s)

QUICK, LOTHAR

Examiner

Vishal Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,21,27-31 and 33-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,21,27-31 and 33-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 21, 30-31, 34, 36-39, 40, 42-44 rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa (JP 409287663 A).

Hasegawa discloses a gasket comprising:

at least one metallic layer including at least one gasket opening and at least one bead (figure 3);

a deformation limiter including at least one filler and one bonding agent;

wherein a mass portion of the filler is greater than a proportion of bonding agent (this is the case since metal powder is a main component of a composite material composed of resin, organic substance and metal powder);

wherein each particle of filler has a small surface area in relation to a volume of the particle (this is the case since it is relative to the surface and volume of a filler, it is well known in the art that metal powder have a small surface area in relation to a volume of the particle);

the particles consist of metal, an alloy, a resin, a ceramic and mixtures thereof;

the bonding agent is a thermosetting material;

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the coating is arranged in a bead;

the coating is applied on a first metallic layer near the bead of a second metallic layer

(figure 8);

the coating is applied on two facing side of a metallic layer (figure 7);

the coating is applied in the form of a line of uneven width or height or shape;

Regarding the method, the method is inherent and disclosed by the reference.

Regarding claim 44:

a coating (4) including a particulate filler and bonding agent, wherein the coating includes, by weight, more filler than bonding agent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 21, 27-31, 33-34, 35-39 and 40-~~44~~⁴⁵ are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa in view of Zerfass (DE 3611285 A1).

Hasegawa discloses a gasket comprising:

at least one metallic layer (1) including at least one gasket opening (opening for a cylinder bore) and at least one bead (bead 3);

a deformation limiter (4) including at least one filler and one bonding agent, wherein the filler and the bonding agent form a coating (4 made of filler and bonding agent);

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wherein a mass portion of the filler is greater than a proportion of bonding agent (this is the case since metal powder is a main component of a composite material composed of resin, organic substance and metal powder);

wherein each particle of filler has a small surface area in relation to a volume of the particle (this is the case since it is relative to the surface and volume of a filler, it is well known in the art that metal powder have a small surface area in relation to a volume of the particle);

the particles consist of metal, an alloy, a resin, a ceramic and mixtures thereof;

the bonding agent is a thermosetting material;

the coating is arranged in a bead;

the coating is applied on a first metallic layer near the bead of a second metallic layer (figure 8);

the coating is applied on two facing side of a metallic layer (figure 7);

the coating is applied in the form of a line of uneven width or height or shape (the width are uneven in width or height or shape);

Regarding the method, the method is inherent and disclosed by the reference.

Regarding claim 44:

a coating (4) including a particulate filler and bonding agent, wherein the coating includes, by weight, more filler than bonding agent.

Hasegawa disclose the invention substantially as claimed above but fail to disclose the particles have a smoothed, rounded surface or are spherical, the particles have a grain size in the range between 5 to 100 micrometer, an additional thermoplastic addition, a mass ratio of filler to bonding agent is at least 2:1 or 9:1. Zerfass discloses a screen-printable epoxy resin having

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particles of grain size in the range between 5 to 100 micrometer, an additional thermoplastic addition (abstract of Zerfass) and a mass ratio of filler to bonding agent is at least 2:1 or 9:1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the deformation limiter of Hasegawa to have particles of grain size in the range between 5 to 100 micrometer, an additional thermoplastic addition and a mass ratio of filler to bonding agent is at least 2:1 or 9:1 as taught by Zerfass, to provide a deformation limiter with high-pressure and heat resistance (abstract of Zerfass).

Regarding claim 28:

As to claims 28 examiner takes official notice that particles are spherical is old and well known in the art. Furthermore evidence is shown by Smith (US. 5,702,111) to have a filler in a gasket or a member that are spherical in shape (12 of smith).

Response to Arguments

5. Applicant's arguments with respect to claims 1, 21, 30-31, 34, 36-39, 40 and 42-44 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 6/16/03 have been fully considered but they are not persuasive.

Applicants argument that Hasegawa does not disclose the filler to bonding agent mass ratio to be at least 2:1 is correct but Zerfass teaches to have ratio of filler to bonding agent is at least 2:1 to 9:1 to provide a deformation limiter with high pressure and heat resistant (see abstract of Zerfass). Additionally Zerfass also discloses particles that have grain size of 5 to 100 micrometers.

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Applicants' argument that Zerfass does not disclose the mass ratio is not persuasive since as pointed out by the applicant that 50-90 percentage of inorganic filler is mixed with epoxy hardener I (meaning that the epoxy hardener is the bonding agent and the filler ratio to bonding agent is at least 2:1 or 9:1).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zerfab et al.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (703) 309-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

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Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

For informal or draft communications, please label "**PROPOSED**" or "**DRAFT**" and fax to:
703-746-3814.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive,
Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP
September 20, 2003



Anthony Knight
Supervisory Patent Examiner
Tech. Center 3600